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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hyon T. Kim

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7257

7590

04/17/2006

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EXAMINER

NGUYEN, HAI V

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,531

Applicant(s)

KIM, HYON T.

Examiner

Hai V. Nguyen

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/05/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the panel decision of the Pre-Appeal Brief Review Conference received on 14 February 2006.
2. Claims 1-90 are presented for examination.
3. The pending related application #: 09/842,495, 09/842,596.
4. The related patent #: 6,920,491 B2, 6,965,951 B2.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-90 are rejected under 35 U.S.C. 102(b) as being anticipated by **Stoevhase** U.S. patent # **5,805,924**.
7. As to claim 1, Stoevhase, Method And Apparatus For Configuring Fabrics Within A Fibre Channel System, substantially teaches the invention as claimed, including a method for handling fabric state changes (*fabric element's name or service changes*), comprising:
receiving an event indicating a fabric state change (*DSP requests*) for one or more host adapter ports (*col. 7, line 44 – col. 8, line 67*); and
dynamically changing the host system's fabric device configuration in response to said receiving an event (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67*), wherein said dynamically changing comprises bringing online or taking

Art Unit: 2142

offline one or more fabric devices for the one or more host adapter ports for the host system (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

8. As to claim 2, Stoevhasse teaches, determining an event type for said event (*name change, service changes, inactive or removed or port addresses changes; col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

9. As to claim 3, Stoevhasse teaches, wherein if the event type indicates that one of the fabric host adapter ports has lost connectivity to the fabric, said dynamically changing comprises taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

10. As to claim 4, Stoevhasse teaches, wherein said taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric comprises: reading a persistent repository that indicates which fabric devices are currently online for the host adapter port that lost connectivity to the fabric; and taking offline the fabric devices indicated by the persistent repository for the host adapter port that lost connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col.*

Art Unit: 2142

7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

11. As to claim 5, Stoevhasse teaches, wherein said taking offline comprises disabling an operating system node for each of the one or more fabric devices being taken offline, wherein each operating system node provides a communication mechanism to a corresponding fabric device (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

12. As to claim 6, Stoevhasse teaches, wherein if the event type indicates that one of the fabric host adapter ports has lost connectivity to the fabric, said dynamically changing comprises:

accessing a configuration file for the host adapter port that lost connectivity to the fabric to determine if fabric devices for that host adapter port are to be unconfigured if that host adapter port loses connectivity to the fabric; and if the configuration file indicates that fabric devices are to be unconfigured upon lose of connectivity to the fabric, taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

13. Claim 7 has similar limitations of claim 4; therefore, it is rejected under the same rationale as in claim 4.

Art Unit: 2142

14. Claim 8 has similar limitations of claim 5; therefore, it is rejected under the same rationale as in claim 5.

15. As to claim 9, Stoevhasse teaches, prior to said receiving an event: a host adapter driver for one of the one or more host adapter ports becoming inactive or detached; and generating the event indicating that one of the one or more host adapter ports has lost connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

16. As to claim 10, Stoevhasse teaches, wherein said accessing a configuration file for the host adapter port that lost connectivity to the fabric comprises reading a user defined attribute in the configuration file, wherein the user-define attribute indicates whether or not fabric devices for that host adapter port are to be unconfigured if that host adapter port loses connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

17. As to claim 11, Stoevhasse teaches, wherein if the event type indicates that one of the fabric host adapter ports has acquired connectivity to the fabric, said dynamically changing comprises bringing online one or more fabric devices for the host adapter port that has acquired connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

Art Unit: 2142

18. As to claim 12, Stoevhase teaches, wherein said bringing online one or more fabric devices for the host adapter port that has acquired connectivity to the fabric comprises: reading a persistent repository that indicates which fabric devices were previously online for the host adapter port that has acquired connectivity to the fabric; and bringing online the fabric devices indicated by the persistent repository for the host adapter port that has acquired connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

19. As to claim 13, Stoevhase teaches, wherein said bringing online comprises creating an operating system node for each of the one or more fabric devices being to brought online, wherein each operating system node provides a communication mechanism to a corresponding fabric device (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

20. As to claim 14, Stoevhase teaches, wherein if the event type indicates that one of the fabric host adapter ports has acquired connectivity to the fabric, said dynamically changing comprises: accessing a configuration file for the host adapter port that has acquired connectivity to the fabric to determine if fabric devices for that host adapter port are to be configured if that host adapter port acquires connectivity to the fabric; and if the configuration file indicates that fabric devices are to be configured upon that host adapter port's connectivity to the fabric, bringing online one or more fabric devices for that host adapter port that has acquired connectivity to the fabric (*col. 2, lines 13-60;*

Art Unit: 2142

col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

21. Claim 15 has similar limitations of claim 12; therefore, it is rejected under the same rationale as in claim 12.

22. Claim 16 has similar limitations of claim 13; therefore, it is rejected under the same rationale as in claim 13.

23. As to claim 17, Stoevhase teaches, prior to said receiving an event: a host adapter driver for one of the one or more host adapter ports becoming active or attached; and generating the event indicating that one of the one or more host adapter ports has acquired connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

24. As to claim 18, Stoevhase teaches, wherein said accessing a configuration file for the host adapter port that has acquired connectivity to the fabric comprises reading a user-defined attribute in the configuration file, wherein the user-define attribute indicates whether or not fabric devices for that host adapter port are to be configured if that host adapter port acquires connectivity to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

25. As to claim 19, Stoevhase teaches, wherein if the event type indicates that a new fabric device has been connected to the fabric, said dynamically changing comprises bringing online the new fabric device for one of the one or more host adapter ports (*col.*

Art Unit: 2142

2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

26. As to claim 20, Stoevhase teaches, wherein said bringing online comprises creating an operating system node for the new fabric device being brought online, wherein the operating system node provides a communication mechanism to the new fabric device (col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

27. As to claim 21, Stoevhase teaches, wherein said bringing online the new fabric device comprises updating a persistent repository to indicate that the new fabric device is online for the host adapter port (col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

28. As to claim 22, Stoevhase teaches, wherein if the event type indicates that a new fabric device has been connected to the fabric, said dynamically changing comprises: accessing a configuration file for one of the one or more host adapter ports to determine if newly connected fabric devices for that host adapter port are to be dynamically configured; and if the configuration file indicates newly connected fabric devices are to be dynamically configured, bringing online the new fabric device for that host adapter port (col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col.

Art Unit: 2142

18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

29. Claim 23 has similar limitations of claim 20; therefore, it is rejected under the same rationale as in claim 20.

30. Claim 24 has similar limitations of claim 21; therefore, it is rejected under the same rationale as in claim 21.

31. As to claim 25, Stoevhase teaches, prior to said receiving an event: connecting the fabric device to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*); and a fabric driver generating the event indicating that the new fabric device has been connected to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

32. As to claim 26, Stoevhase teaches, wherein said accessing a configuration file comprises reading a user-defined attribute in the configuration file, wherein the user define attribute indicates whether or not newly connected fabric devices for that host adapter port are to be dynamically configured upon detection (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25*).

33. As to claim 27, Stoevhase teaches, wherein the one or more host adapter ports comprise Fibre Channel host adapter ports (*col. 2, lines 13-60; col. 6 line 44 – col. 7,*

Art Unit: 2142

line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

34. As to claim 28, Stoevhase teaches, wherein the fabric comprises a Fibre Channel switched fabric comprising a plurality of Fibre Channel switches (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

35. As to claim 29, Stoevhase teaches, wherein the fabric is part of a storage area network (SAN), and wherein the fabric devices comprise storage devices (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

36. As to claim 30, Stoevhase teaches, wherein said dynamically changing comprises verifying the one or more, fabric devices before bringing the one or more fabric devices online, wherein said verifying comprises accessing a fabric name server to determine if the one or more fabric devices are currently connected to the fabric (*col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 – col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

37. Claim 31 is corresponding system claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

38. Claims 32-60 are similar limitations of claims 2-30; therefore, they are rejected under the same rationale as in claims 2-30.

Art Unit: 2142

39. Claim 61 is corresponding computer readable medium claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

40. Claims 62-90 are similar limitations of claims 2-30; therefore, they are rejected under the same rationale as in claims 2-30.

41. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 571-272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai V. Nguyen
Examiner, AU 2142



THONG VU
P.E.

